

THE GENUS *ITOLIA* WILCOX
(Diptera: Asilidae)

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The genus *Itolia* and the species *maculata* were described² from limited material largely collected by D. K. Duncan in Arizona. Since then large series of this species have been seen, which help to clarify the status of the species. These series were collected in several localities in Arizona by Owen Bryant and F. H. Parker (Tucson, June and July; San Carlos, August; Roosevelt Lake, August; and Canyon Lake, August). Several years ago P. H. Timberlake collected a single specimen of a new species near Palm Springs, California, and during the 1947 season additional specimens of this species and specimens of another species were taken in Arizona and are described herewith. The specimens are in the writer's collection unless indicated otherwise. I am indebted to Owen Bryant and to P. H. Timberlake for the loan of specimens.

KEY TO THE SPECIES

1. Scutellum, except the very narrow posterior margin, whitish pollinose; third antennal joint tapering apically, style slender and 4/5 the length of the third joint; pollinose bands on segments 1-4 entire or nearly so; length 7-9 mm. (Calif.).....
.....*timberlakei* new species
- Apical half or more of the scutellum shining black; third antennal joint of nearly uniform width, style not more than half the length of the third joint.....2
2. Legs black, at most the knees reddish; basal 1½ abdominal segments black, the remainder yellowish, pollinose bands confined to segments 1-4 in both sexes, interrupted on all segments or sometimes entire on segments 1-2 or 1-3; length 5-9 mm. (Ariz.).....
.....*atripes* new species
- Apical half or more of the femora and the tibiae yellowish; basal 4 abdominal segments black, pollinose bands on segments 1-7 in male and 1-5 in female interrupted on all segments or sometimes entire on the second; length 6-9 mm. (Ariz.).....
.....*maculata* Wilcox

¹Alhambra, California

²Wilcox, J., 1936. Pan-Pac. Ent. 12: 201-204.

Itolia timberlakei Wilcox, new species

Male. Length 8 mm. Head black; face, frons, and occiput densely grayish white pollinose; hairs and bristles white. First two antennal joints brown and short white haired; third joint and style black; third joint gradually tapering apically and $1\frac{1}{2}$ times the length of the first two joints together; style slender and $\frac{4}{5}$ the length of the third joint.

Thorax densely grayish white pollinose, the following parts polished black: a small spot on humeri, a central stripe not reaching scutellum, a broader and shorter lateral stripe on either side crossing the suture, a small spot on the postalar calli, and the lower half of the sternopleurae. Hairs and bristles white, 3-4 presutural, 3 supraalar, and 1 postalar, all rather weak. Scutellum densely grayish white pollinose, with only the very narrow posterior margin black; disc with short sparse erect white hairs. Metanotum shining black, the slopes pollinose.

The first $4\frac{1}{2}$ abdominal segments black, the remainder and genitalia yellowish brown. Segments 1-4 with complete posterior pollinose fasciae, narrow at the middle and gradually widening to the anterior corners at the sides, fasciae on segment 5 interrupted; segments 6-7 with posterior lateral spots, those on segment 7 very small. Hairs and bristles white. Venter, except narrow posterior margins of segments, gray pollinose.

Basal $\frac{3}{4}$ of the fore and middle femora, basal $\frac{2}{3}$ of hind femora, apical $\frac{1}{4}$ of the tibiae and the tarsi, black; remainder yellowish. Hairs and bristles white; claws black, basal $\frac{1}{4}$ yellowish, pulvilli white, empodium yellowish.

Halteres light yellowish, base brown; alulae yellowish. Wings hyaline, veins yellowish to light brown, anterior cross vein slightly before middle of discal cell.

Female. Length 9 mm. Similar to male. Posterior pollinose band on segment 4 of abdomen narrowly interrupted at middle and only segment 5 with a lateral pollinose spot; dorsum of segments 5-8 and venter of segments 6-8 yellowish brown and without pollen, except as indicated; apical spines brown. Hind femora yellowish brown, the basal $\frac{2}{3}$ darker, especially dorsally.

Holotype: Male, WHITE WATER, CALIF., VIII-10 '47 (J. Wilcox). *Allotype:* Female, same data. *Paratypes:* 19 specimens, same locality VIII-9 and 10 '47 (Guy F. Toland and Wilcox); and INDIO, CALIF., VIII-9 '47 (Toland and Wilcox); one specimen, SNOW WASH, CALIF., VII-2 '36 (P. H. Timberlake) in the collection of the Citrus Experimental Station, University of California.

Named in honor of P. H. Timberlake, who first collected this species and who has collected a number of other fine Asilidae.

Itolia atripes Wilcox, new species

Male. Length 7 mm. Head black; face and front silvery pollinose, occiput gray pollinose; mystax, hairs, and bristles white. Antennae dark brown, first two joints subequal in length, short white haired; third joint $1\frac{1}{2}$ times the length of the first two joints together, broadest at base and of nearly uniform width from there on; style same width as apex of the third joint and about $\frac{1}{2}$ of the length of the third joint.

Mesonotum gray pollinose with the usual three broad shining black stripes; humeri and postalar callosity shining black; hairs and bristles white, 2 presutural, 1-2 supraalar and 1-2 postalar. Pleurae gray pollinose, the sternopleurae largely and the Pteropleurae with a small spot shining black; hairs and bristles white, with two posterior bristles and some rather long hairs on the mesopleurae. Scutellum shining black, the basal $\frac{1}{3}$ gray pollinose; a number of fine erect white hairs posteriorly.

Abdomen yellowish red, the first segment black and the second basally dark brown; first three segments with broad posterior gray pollinose bands which are narrowly connected at middle; posterior corners of fourth segment gray pollinose. Hairs white, long, numerous and bristle-like on sides of first segment, short otherwise. Genitalia yellowish red with touches of brown, hairs white.

Coxae black, largely gray pollinose and long white haired. Legs black, somewhat reddish at the knees; hairs and bristles white. Claws black, the bases reddish, pulvilli whitish, empodia reddish.

Halteres light yellow, the lower stem brown; alulae yellowish brown. Wings hyaline, veins light brown, anterior crossvein just before middle of discal cell.

Female. Length 6 mm. Similar to male. Pollinose band on third abdominal segment broadly interrupted, ovipositor brown, apical spines reddish. Anterior crossvein at $\frac{2}{5}$ the length of the discal cell.

Holotype: Male, MOHAWK, ARIZ., IX-6 '47 (J. Wilcox). *Allotypes:* Female, same data. *Paratypes:* 60 specimens from the type locality IX-6, 7, and 10 '47 (Itol J. and J. Wilcox); AZTEC, ARIZ., VIII-27 and IX-7 '47 (Wilcox); and WENDEN, ARIZ., VIII-17 '47 (Wilcox).

The pollinose markings on the abdomen are much less intense and more indefinite than in the other two species, and in a number of specimens the bands are interrupted on all segments on the dorsum. In some specimens the basal half of the scutellum is pollinose, and the tibiae dorsally are dark reddish on the basal half. The Three black stripes on the mesonotum in this species and in *maculata* are wider than in *timberlakei*. The specimens included in the paratype series of *maculata* from Bill Williams Fork, Ariz., apparently belong to this species.